

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/730,119	12/09/2003	Mamoru Ito	H-1122	4314
7590 02/23/2005			EXAMINER	
Mattingly, Stanger & Malur, P.C. Suite 370			NHU, DAVID	
1800 Diagonal	Road		ART UNIT	PAPER NUMBER
Alexandria, VA 22314			2818	
			DATE MAIL ED. 02/22/2004	

DATE MAILED: 02/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
Office Action Summans	10/730,119	ITO ET AL.				
Office Action Summary	Examiner	Art Unit				
	David Nhu	2818				
The MAILING DATE of this communication apports of the second for Reply	ears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	6(a). In no event, however, may a reply be tim within the statutory minimum of thirty (30) days ill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. O (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 09 De	ecember 2003.					
Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims		•				
4)⊠ Claim(s) <u>1-19</u> is/are pending in the application.						
4a) Of the above claim(s) <u>17-19</u> is/are withdrawn from consideration.						
5)⊠ Claim(s) <u>1-12</u> is/are allowed.						
6)⊠ Claim(s) <u>13-16</u> is/are rejected.	6)⊠ Claim(s) <u>13-16</u> is/are rejected.					
7) Claim(s) is/are objected to.	7) Claim(s) is/are objected to					
8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
9) The specification is objected to by the Examiner	•.					
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11)☐ The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.				
Priority under 35 U.S.C. § 119						
 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documents 	•	-(d) or (f).				
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
	Sain	Za				
Attachment(s)	<u>_</u> '					
1) M Notice of References Cited (PTO-892) 2) Motice of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview Summary Paper No(s)/Mail Da					
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)		atent Application (PTO-152)				
Paper No(s)/Mail Date <u>01</u> .	o) 🗀 Ouiei					

Application/Control Number: 10/730,119 Page 2

Art Unit: 2818

DETAILED ACTIONS

Specifications

1. Page 21, line 23, "by the cramping surface 16a" should be -by the clamping surface 16a--

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.
- 3. Claims 13-16 are rejected under 35 U.S.C. 102(e) as being anticipated by Ito(6,703,261 B2).

Regarding claim 13, Ito, (see figures 1, 2, 7, 8, col. 15, lines 7-44), teaches a semiconductor device 1 comprising: a metal plate 4 for mounting a semiconductor chip 15, 16, said metal plate having an edge portion formed with a depressed portion 4a; a plurality of leads 5, 6 connected electrically to said semiconductor chip; and molding body 2 for molding said semiconductor chip and a part of each said plurality of leads, wherein each of said plurality of leads has one end disposed above said depressed portion 4a of said metal plate.

Regarding claims 14-16, Ito, (see figures 1-2, 7-8, col. 13, lines 16-67, col. 14, lines 1-67, col. 15, lines 1-44), also teaches an insulator 2 is disposed between each of said plurality of leads 5, 6 and said metal plate 4; the insulator is molding body 2; plurality of leads have respective portion 9 for supporting said metal plate 4 (see figures 1, 2).

Application/Control Number: 10/730,119 Page 3

Art Unit: 2818

Allowable Subject Matter

2. Claims 1-12 are allowed.

The following is an examiner's statement of reasons for allowance: None of the references of record teaches or suggests as cited in claims 1, 12: a molding body for molding said semiconductor chip and a part of each of said plurality of leads, wherein a slit, extending lengthwise in a direction in which said lead is extracted, is formed in each of said leads located outside said molding body, wherein said slit is formed in said bent portion, and those of a plurality of outer-lead split portions separated by said slits which are adjacent to each other are connected at respective tip portions thereof.

Conclusion

- 3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Ito'112, Spairisano'307, Bartlow'649, Dolber'474 are cited as of interest.
- 4. A shortened statutory period for response to this action is set to expired 3 (three) months and 0 (zero) day from the date of this letter. Failure to respond within the period for response will cause the application to become abandoned (see 710.02 (b)).
- 5: Any inquiry concerning this communication on earlier communications from the examiner should be directed to David Nhu, (571)272-1792. The examiner can normally be reached on Monday-Friday from 7:30 AM to 5:00 PM. The examiner's supervisor, David Nelms can be reached on (571)272-1787.

The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding

Application/Control Number: 10/730,119 Page 4

Art Unit: 2818

should be directed to the receptionist whose telephone number is (703) 308-0956.

Information regarding the status of an application may be obtained from the patent application information retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

David Nhu

ja /

February 18, 2005